

WHAT IS CLAIMED IS:

1. A light emitting assembly for vehicle illumination comprising a plurality of relatively rigid light guides in overlying relation to one another, each of said light guides having at least one light input surface, at least one light source positioned along said light input surface for supplying light to said light guides, and a plurality of light extracting deformities on at least one surface of each of said light guides for controlling an output ray angle distribution of emitted light to suit a particular application, said light guides being positioned relative to one another such that the light emitted from at least one of said light guides passes through another of said light guides in a desired direction or output ray angle distribution.

2. The assembly of claim 1 wherein said light source is common to more than one of said light guides.

3. The assembly of claim 1 wherein a separate light source is provided for each of said light guides.

4. The assembly of claim 1 wherein said deformities have shape and are at least one of depressions and raised surfaces on said at least one surface of each of said light guides.

5. The assembly of claim 1 wherein said deformities vary.

6. The assembly of claim 1 wherein at least one of said deformities on at least one of said light guides is at least one of prismatic, lenticular and other device that changes the output ray angle distribution.

7. The assembly of claim 1 wherein at least one of said light guides has said deformities on more than one surface.

8. The assembly of claim 1 wherein at least one of said light guides has said deformities on two sides.

9. The assembly of claim 1 wherein said light source is a light emitting diode.

5 10. The assembly of claim 1 wherein said light source is attached to a circuit.

11. The assembly of claim 1 wherein a separate light source is provided for each of said light guides, said light source for each of said light guides being embedded, potted, bonded or molded in said light guides.

10 12. The assembly of claim 1 further comprising a transparent substrate overlying at least one surface of at least one of said light guides.

13. The assembly of claim 12 wherein said substrate comprises at least one of a sheet, film, lens and plate.

15 14. The assembly of claim 12 wherein said substrate is attached to said one light guide.

15. The assembly of claim 12 wherein said substrate is positioned against said one light guide.

16. The assembly of claim 12 wherein said substrate covers said one surface of said one light guide.

20 17. The assembly of claim 12 wherein at least some deformities are on said substrate.

18. The assembly of claim 12 wherein said substrate has at least one of a prismatic lens, lenticular lens, and other device that changes the output ray angle distribution.

5 19. The assembly of claim 1 further comprising a plurality of transparent substrates overlying at least one surface of at least one of said light guides.